



**MAXON**<sup>®</sup>  
BATTERIES

**MXEG12-135**

**The Endurance Series**



### SPECIFICATIONS

Nominal Voltage	12V (6 cells per unit)	
Design Floating Life @ 25°C	20 Years	
Nominal Capacity @ 25°C (20 hour rate @ 6.75A, 10.8V)	135Ah	
Capacity @ 25°C	10 hour rate (12.08A, 10.8V)	120.8Ah
	5 hour rate (21.35A, 10.5V)	106.8Ah
	1 hour rate (81.98A, 9.6V)	82Ah
Internal Resistance	Full Charged Battery @ 25°C	≤5.0mΩ
Ambient Temperature	Discharge	-25°C~60°C
	Charge	-25°C~60°C
	Storage	-25°C~60°C
Max. Discharge Current @ 25°C	660A(5s)	
Capacity affected by Temperature (10 hour rate)	40°C	108%
	25°C	100%
	0°C	90%
	-15°C	70%
Self-Discharge @ 25°C per Month	3%	
Charge (Constant Voltage) @ 25°C	Standby Use	Initial Charging Current Less than 25A Voltage 13.6-13.8V
	Cycle Use	Initial Charging Current Less than 25A Voltage 14.4-14.9V



**12V**  
Voltage

**135Ah**  
Capacity

**Gel**  
Technology

**Deep**  
Cycle

The Maxon Endurance Series is a Gel AGM Hybrid battery. It uses a thick plate design with advanced AGM separators and a newly developed silicone gel electrolyte imported from Germany. This makes them an ultra-high-performance battery.

They have the ability to be discharged deeper with twice the cycle life of standard AGM batteries, giving them a more reliable performance under an extreme temperature range (-25°C to 60°C degrees). They are highly suited to Mobility, 4WD, Solar, Marine and standby applications.

### GENERAL FEATURES

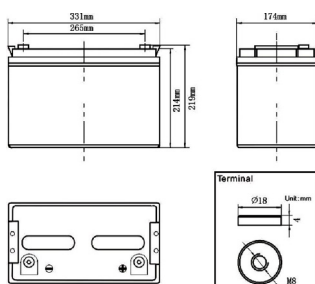
- Long life and higher stability under high temperature
- High cycle ability 2,200 cycles @ 30% DOD
- Integrated design to ensure the best in uniformity and reliability
- Operates in high temperature range -25°C~60°C
- Extreme Vibration Resistant
- Advanced AGM Separators

### APPLICATIONS

- Caravan, Camper Vans and 4WD
- Mobility & Wheel Chairs
- Marine
- Golf Trolleys
- Solar Systems
- Standby Systems

### DIMENSIONS & WEIGHT

Length (mm)	331±1
Width (mm)	176±1
Height (mm)	214±1
Total Height (mm)	220±1
Weight (kg)	33.8±3%



Marine



Solar



4W Drives



Caravans



Mobility



UPS



Standby



CE



CERTIFIED  
ISO 9001  
ISO 14001  
PRODUCER

### COMPLIED STANDARDS

IEC 60896-21/22  
IEC61427  
GB/T 19638

JIS C8704  
BS6290 part4  
CE/ISO

## BATTERY DISCHARGE TABLE

### Discharge Constant Current per Cell (Amperes at 25°C)

F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	217.04	132.13	88.57	81.98	47.34	33.18	22.57	14.88	13.30	7.25	1.61
1.65V	213.01	129.69	86.99	80.40	46.48	32.57	22.20	14.64	13.05	7.11	1.57
1.70V	209.11	127.37	85.40	78.93	45.63	31.96	21.72	14.40	12.81	6.98	1.55
1.75V	205.20	124.93	83.69	77.47	44.77	31.35	21.35	14.15	12.57	6.84	1.53
1.80V	197.27	120.17	80.52	74.54	43.07	30.26	20.50	13.54	12.08	6.75	1.49

### Discharge Constant Power per Cell (Watts at 25°C)

F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	342.4	208.5	139.8	129.3	74.7	52.4	35.6	23.5	21.0	11.4	2.54
1.65V	336.2	204.7	137.2	126.9	73.3	51.5	35.0	23.1	20.6	11.2	2.49
1.70V	329.9	200.9	134.7	124.6	71.9	50.5	34.3	22.7	20.2	11.0	2.44
1.75V	323.7	197.1	132.1	122.2	70.6	49.5	33.7	22.2	19.8	10.8	2.40
1.80V	311.3	189.5	127.1	117.5	67.9	47.6	32.4	21.4	19.1	10.6	2.35

**Note:** The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice.

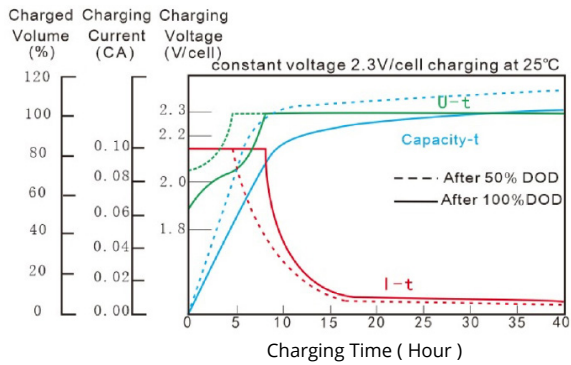
## BENEFITS

- ✓ Ultra high performance Gel Hybrid
- ✓ Designed for deeper discharge
- ✓ High Cycling up to 2,200 cycles @ 30% DOD
- ✓ Operates in high temperature range -25°C~60°C
- ✓ Excellent for energy storage
- ✓ Fully sealed, allows for safe operation in any position
- ✓ Impact & fire resistant ABS case
- ✓ Up to 3 years replacement warranty
- ✓ Resistant to heavy vibrations
- ✓ Low self discharge
- ✓ Relief Valve with flame integrated arrestors
- ✓ Japanese Technology

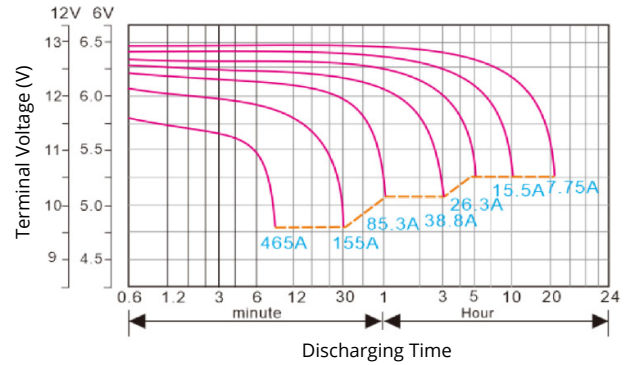


## PERFORMANCE CHARACTERISTICS

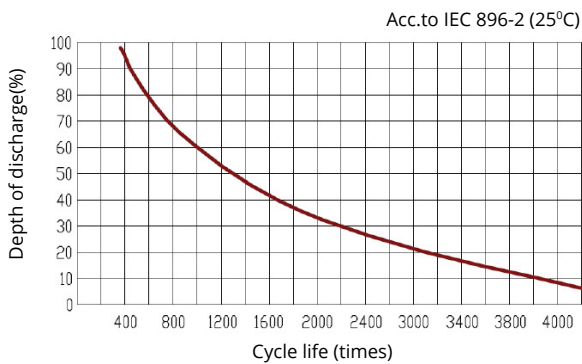
### Charge Characteristics (25°C/77°F)



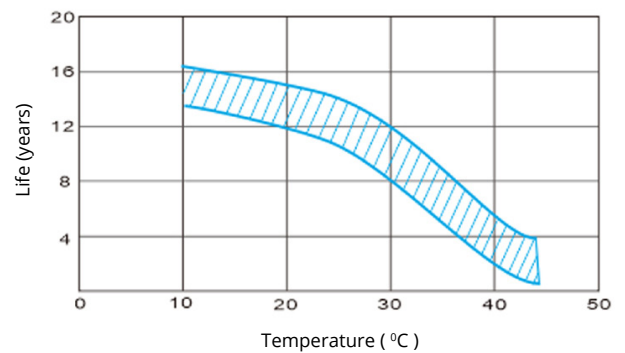
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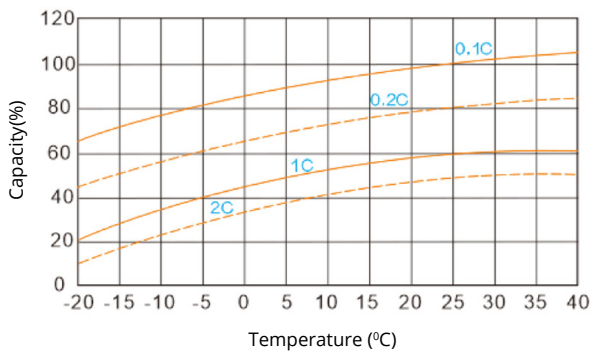
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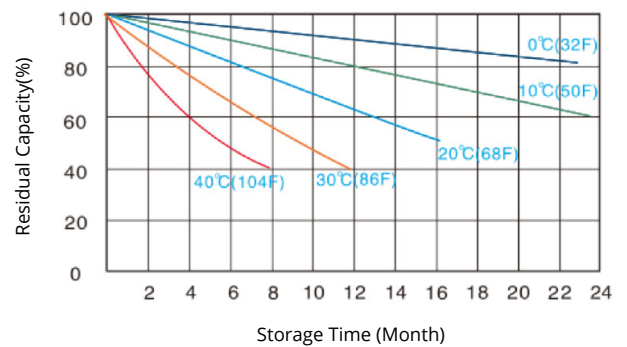
### Temperature vs Float Life



### Capacity Curve At Different Temperature



### Self Discharge Characteristics



## BATTERY CONSTRUCTION

Component	Positive plate	Negative plate	Container & Cover	Safety valve	Terminal	Separator	Electrolyte	Pillar seal
Features	Thick high Sn low Ca grid with special paste	Balanced Pb-Ca grid for improved recombination efficiency	Fire resistance ABS (UL94-V0 optional)	Flame Si-Rubber and aging resistance	Female Copper Insert M8	Advanced PVC /AGM separator for high pressure cell design	Silicon Gel import from Germany	Two layers epoxy resin seal